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Arrhythmias

AMIODARONE USE IS NOT ASSOCIATED WITH MORTALITY IN PATIENTS WITH ATRIAL FIBRILLATION AND KIDNEY DYSFUNCTION OR DIALYSIS: THE TREAT-AF STUDY

ACC Moderated Poster Contributions
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Session Title: Arrhythmias: AF/SVT: Continuing Role of Pharmacologic Therapy for Atrial Arrhythmias
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Background: Kidney dysfunction is strongly associated with sudden cardiac death. Although amiodarone is hepatically metabolized, its cardiac effects could potentiate arrhythmias in patients with kidney dysfunction, however, information on its safety in this population is limited. We investigated the relationship of amiodarone use and mortality in AF based on severity of kidney dysfunction.

Methods: The Retrospective Evaluation and Assessment of Therapies in AF (TREAT-AF) study is a retrospective cohort study of patients with incident AF treated in the Veterans Health Administration. National inpatient, outpatient, and fee basis claims data was used to identify patients with newly diagnosed non-valvular atrial fibrillation or atrial flutter between 10/1/04 - 9/30/08 that were seen in outpatient clinics within 90 days of AF. Estimated GFR was calculated by the CKD-EPI formula using the serum creatinine closest to the index date of AF, from 365 days before to 90 days after diagnosis of AF. CKD stage was based on GFR and outpatient dialysis claims. Medication use was identified from drug prescriptions data from 0 to 90 days after AF diagnosis. We performed multivariate Cox regression to estimate the association of amiodarone use with time to death, stratified by CKD stage, over a median follow-up of 2.9 years.

Results: Among 126,162 patients with newly diagnosed AF, the mean (SD) age was 72 (±10) years; 1.6% were women. Compared with CKD Stage I patients, patients with severe kidney dysfunction (Stage IV, V, VD-dialysis) were older, had higher prevalences of HF, DM, prior stroke/TIA, CHADS2 >=2, and higher Charlson comorbidity scores. The overall prevalence of amiodarone use was 9.5% and increased with lower kidney function. After adjustment for age, sex, race, HTN, HF, DM, CHADS2 score, Charlson comorbidity score, CKD stage, and use of digoxin, BBs, diuretics, antiplatelet agents, warfarin, statins, ACEI/ARB, use of amiodarone was not associated with mortality (HR 0.99, p = NS) in the entire cohort or in any of the subgroups defined by CKD stage.

Conclusion: In patients with newly diagnosed AF, amiodarone was not associated with mortality across, overall or in any stratum of kidney dysfunction or dialysis.